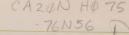
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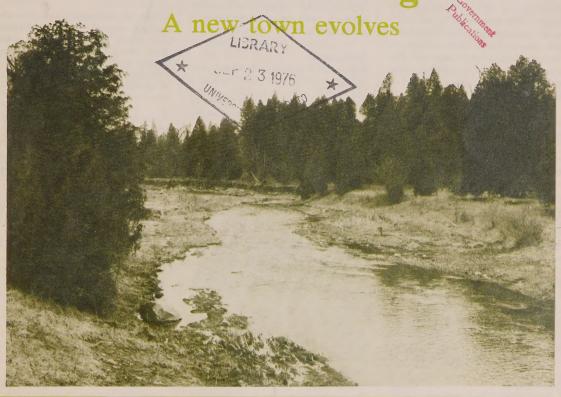




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By RAY TUOKKO and ROBERT NYKOR communications branch

Two years of research and planning by the North Pickering Project team of the Ministry of Housing has culminated in a recommended plan for North Pickering. The new community will be located on a 10,000-hectare (25,200-acre) site northeast of Metro Toronto. (See Housing Ontario April/May, 1975).

North Pickering, with a projected population of 75,000 persons in 15 to 20 years, is an important element in the long-range housing strategy for the Toronto region. It will ultimately add 23,000 units to the housing stock of the area.

It will also help channel economic growth towards the Region of Durham and assist in reducing growth pressures in Metro and the area west of Metro.

The recent federal government de-

cision to halt development of an airport at Pickering will not alter Ontario's plans for the new community. The uncertainty of the airport project was recognized early in the planning process. As a result, economic and physical planning was undertaken independently of airport proposals.

A major aspect of the recommended plan is the emphasis placed on preservation and enhancement of agricultural land, which resulted in 4,200 hectares (10,400 acres) on the west (Metro) side of the site being set aside for long-term agricultural use.

The 2,700-hectare (6,800-acre) urban area is located on the east, or Oshawa, side of the site.

A unique aspect is that, for the first time in Ontario experience, the metric system is being used in planning.

The recommended plan which will form the basis for a final plan for development, has been presented to the North Pickering Development Corporation. This Crown agency is responsible for preparing the plan for development and its ultimate implementation.

The recommended plan outlines the general principles for development and the broad pattern under which it will take place during the next 15 to 20 years. It provides a guide for the detailed designing of an urban community for 75,000 persons, and for determining the most effective ways to utilize the agricultural resources.

Within this framework, changes are likely to occur. To ensure that shifts in public attitudes and priorities are reflected in ongoing planning, monitoring and evaluation will be an integral part of the development process.

The recommended plan evolved through an extensive public planning process. As important issues were identified, views of citizens from Metro through Oshawa were sought and, where possible, were incorporated into the plan. This process directly affected decisions on population, the location and form of the urban community, and the positive program of preserving agricultural land.

The essence of the plan is the development of a comprehensively planned new community to achieve a careful balance of housing, employment and social facilities within a rigorously controlled physical framework. The recommended plan establishes three planning areas (see map pages 14 and 15):

An urban area on the east side of the site on approximately 2,700 hectares [6,800 acres].

A rural area to the west on approximately 4,200 hectares [10,400 acres].

An open space system of approximately 3,200 hectares [8,000 acres], including agricultural uses.

A live-work community:

A major goal is to create a community in which residents may conveniently choose to both live and work. This would lessen the need for long journeys to work, moderate future commuting pressures in the region, and provide an opportunity for living in a self-sustaining community rather than in a suburban setting.

To achieve this goal it will be necessary to:

Balance the number of jobs with the size of labor force.

Provide a wide range of job opportunities in office, professional and industrial employment.

Encourage at least 50 per cent of the new community's resident labor force to both live and work in North Pickering.

Studies indicate that approximately 55 per cent of the future population of North Pickering would likely be of working age. Not all of these, however, would seek employment. Based on experience elsewhere, it was estimated that 76 per cent of the working age population would participate in the work force. A population of 75,000, therefore, would generate an active labor force of 31,500 persons.

The new community's location offers definite advantages. North Pickering falls within Metro's industrial market area. Given present trends, the total supply of industrial land likely to be available in the new community is equal to approximately one year's demand in the Toronto area.

North Pickering's location is likely to be so attractive to secondary industry that particular industrial groupings, which it would be strategically desirable to locate in the eastern sub-region, have been identified.

While balancing the number of jobs with the size of the resident labor force appears to be attainable, providing a

URBAN RECOMMENDATIONS

Population:

Approximately 75,000 persons. **Density:**

Approximately 33 dwelling units per net hectare (13 dwelling units per net acre) resulting in an average residential density of 105 persons per hectare (42 persons per acre).

Employment:

To achieve a "live-work community" approximately 31,500 jobs should be provided. At least 50 per cent of the resident labor force would be encouraged to work in the community.

Along with its commercial components, 440 hectares (1,100 acres) of land should be set aside for industry to generate 15,000 industrial jobs. In addition, approximately 17,000 service and retail jobs are proposed.

Central area:

A comprehensive central area is recommended on the eastern rim of the West Duffin Creek Valley. Major components would include: shopping facilities; a community college; a hospital; regional transit interchange; hotels; offices; entertainment; housing for approximately 5,000 persons; and major recreational and cultural facilities.

Secondary centres:

Four secondary centres each serving the day-to-day needs of 15,000 to 20,000

people would be established. Each will provide facilities such as a supermarket, convenience shops, a day care centre, a secondary school, a health clinic and recreation facilities. The central area would also include a derivative of a secondary centre.

Neighborhoods:

The basic residential component in the recommended plan is the neighborhood of approximately 50 hectares (130 acres) to accommodate 4,500 to 5,000 persons. There are 16 neighborhoods in the plan.

Housing:

More than 23,000 dwelling units are to be provided to serve people with a wide range of values, ages, preferences, life styles, and economic circumstances.

Social planning:

The plan contains proposals for a comprehensive social program based on vatiety, choice, access, flexibility and opportunities for social enrichment.

Roads:

The urban road system is structured upon a basic grid of one kilometre (approximately six-tenths of a mile) spacing. Major and minor arterials are alternated within the grid.

Regional transportation:

The future regional roads, Highway

407, the East Metro Freeway, and an improved Highway 7 are being studied by the provincial Ministry of Transportation and Communications. The recommended routes in this plan are designed to direct through traffic around the periphery of the site.

Regional transit:

A right of way for a future regional transit line has been provided within the new community, with provision for three stops.

Local transit:

A bus system is recommended to best respond to local transit needs. The proposals for public transit are based on the principle of decreasing reliance on private automobiles.

Environment and open space:

The plan incorporates a comprehensive, interlocking network of open spaces to connect all recreational areas by a vehicle-free pathway system.

Phasing:

Implementation is recommended in four stages:

Stage	Population (Cumulative)	
1	15,000	1981-82
2	30,000	1984-85
3	45,000	1986-87
4	75,000	1991-

RURAL RECOMMENDATIONS

The recommended plan has divided agricultural lands into two categories to encourage the long-term use of the most productive soils on the site:

Agriculture 1:

Existing viable farm uses should be encouraged to continue on a long-term basis.

Agriculture 2:

Lands within this category should be encouraged to provide a diversified agricultural base.

Hamlets:

Residents of Whitevale, Green River,

Locust Hill, Cherrywood, Cherrywood East, Martins Subdivision and the social community of Cedar Grove should be encouraged to become involved in the economic, physical and social planning of their hamlets. The hamlets should remain as compact rural units.

Open space system:

The 8,500 acre open space system located along the western and southern boundary of the site may be incorporated into the Parkway Belt System east when the belt is designated east of Highway 48.

Agricultural uses, particuarly in the western section should be encouraged to remain. The open space system would provide a link to all recreation components within the site, including the valley systems, the regional park and golf courses.

Regional park:

A major park on 800 hectares (2,000 acres), which would provide a complete range of recreational needs, is proposed for the south-west corner of the open space system.

wide range of job opportunities will be difficult. Primarily, this is due to the traditional concentration of office, technical and professional employment (a major component of service employment) in Toronto. The difficulty of decentralizing this growing component of total employment from its traditional downtown Toronto location has not been underestimated. A special study was undertaken in co-operation with the Metro Toronto planning department to analyse problems inherent in trying to achieve a better employment mix. Significiant conclusions of the study were:

Downtown Toronto will continue to be the single most attractive location for offices in the region.

A definite potential exists for some of the large office users to consider transferring some of their functions to peripheral sites.

The potential for a peripheral location appears to be greatest with newly established or diversifying firms.

Possible candidates are insurance companies, data processing systems, research development establishments, branches of international firms, regional sales offices, and some government functions.

To ensure that the community is a "live-work" community, at least 50 per cent of the resident labor force should live and work in North Pickering. This objective appears reasonable, although it may be ambitious in the light of the high commuting rate within the Central Ontario Lakeshore Urban Complex.



No one can choose to live and work in the same community unless suitable housing and employment are available. Accordingly, the provision of housing must match the employment base and the income levels of the people employed in North Pickering.

The recommended plan has been developed on the principles of convenience and choice to allow flexibility and variety in its long-range implementation.

A review of community design over the past 30 years shows there has been a marked inclination to concentrate on convenience while virtually ignoring choice. Early British new town neighborhoods, for example, while internally convenient were somewhat rigid. This tended to restrict residents to one neighborhood centre. If another centre offered a better choice of services or facilities, it was not readily accessible.

The objective of providing choice can best be met by providing a high degree of access for residents in reaching employment centres, shopping institutions, facilities, and services. This implies a strong relationship between residential distribution, the location of jobs, shopping and social facilities, and the design of the roads, public transportation and pedestrian network.

As a result of intensive studies into the different facilities required in the community, it was concluded that there were three identifiable—though by no means completely clear cut thresholds around which the new community could be structured—the neighborhood, the secondary centre, and the central area.

Neighborhoods are primarily residential areas that would house approximately 4,500 to 5,000 people. They would be bounded by arterial roads and cover approximately one square kilometre.

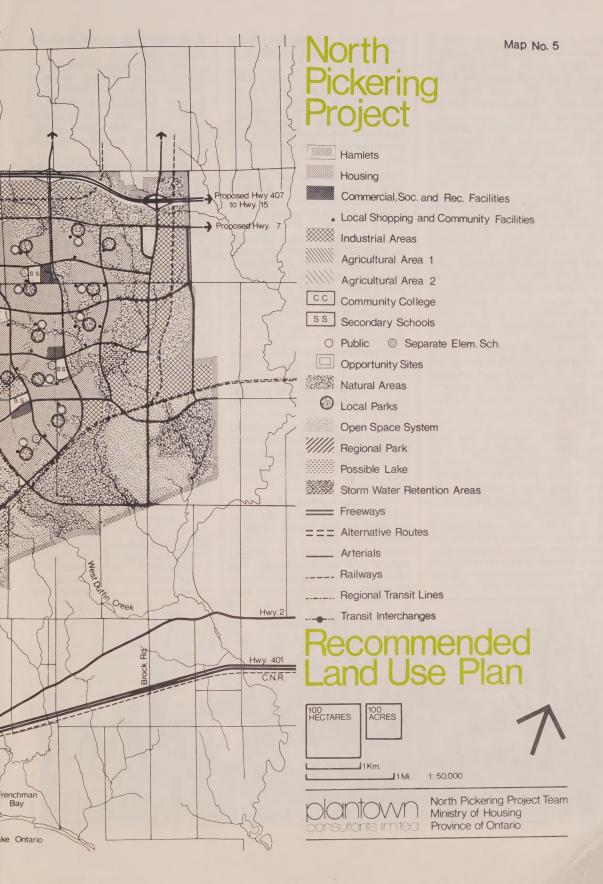
Each neighborhood should contain an elementary school and day care centre (probably adjacent to a local park). In addition, there would be a convenience or corner store located at a bus top on a minor arterial road, where it intersects with the pedestrian walkway system.

Secondary centres are one of the most significant elements of the community structure. They are designed to be the focal point for many of the day-to-day needs of the 15,000 to 20,000 people they serve.

The centres would be located at the intersections of major and minor arterial roads, and would have high access to both through and local traffic.

Each secondary centre would contain facilities such as a community health clinic, indoor and outdoor recreation facility, secondary school, business and social services, churches, post office, police sub-station and higher density housing. There would also be a food supermarket and convenience shops.





Total retail space in each would be approximately 5,800 to 7,000 sq. metres (62,000 to 82,000 square feet). The entire centre would cover approximately 24 hectares (60 acres), including a community park and open space, as well as parking facilities.

Five secondary centres are proposed for the urban area. The community is not, however, divided into five identical compartments, because a quasi-secondary centre is incorporated into the central area.

The central area is the downtown for North Pickering, planned to accommodate the needs of the 75,000 residents. It is not seen as a major regional centre.

The central area is located on the east bank of the West Duffin Creek, overlooking the valley. It would be accessible by a major north-south arterial road on the east side, and by major east-west arterial roads on the north and south. The local transit service would focus on the downtown.

There would be a central core containing commercial, entertainment and hotel facilities, with a major concentration of comparison shopping stores including, at maturity, a full-sized department store and a discount department store.

Residential, commercial and office uses would extend the length of the central area which, overall, would be approximately 1500 metres (5,000 feet) long, taking 15 to 20 minutes to walk and covering approximately 100-120 hectares (250-300 acres).

One of the single most important elements of the central area is the network of open spaces. Access to the open space network would be through its central north-south development corridor. It would be shared by pedes-

trians, cyclists and local buses, but all private vehicular traffic would be excluded

Along the West Duffin Creek valley edge, a continuous walkway and bicycle path would be created to connect various lookout points. Community facilities, including a community college, would be located adjacent to open space areas on the edge of the central area.

The major industrial areas lie along the northern and eastern boundaries of the site. In total, these areas contain approximately 440 hectares (1,100 acres)

Part of the eastern industrial area is located in an environmentally sensitive area. Industrial development particularly in the southern area, should therefore be custom tailored to respect the environment. Prestigious industrial uses, such as those found in the Don Mills area of Metro, are the type forseen for this area.

The regional roads, particularly Brock Road and the existing Highway 7, will initially serve the industrial areas. Later, Highway 407 will augment road capacity, particularly in the northern area.

The planned transportation network provides a permanent framework which joins homes, industry, shops, and social services while remaining flexible to adapt to future changes in travel requirements.

The two-kilometre (1.2 miles) grid of major arterials of four to six lanes encompasses areas housing 15,000 to 20,000 people. There would be limited access to these roads, and on-street parking would not be permitted. The major arterials provide connections to the secondary centres and central area

of the community, as well as the surrounding region.

Minor arterials are located approximately midway between the major arterials, creating a grid system of one kilometre spacing. Major arterials are designed for fast access to the external road system, while minor arterials would serve the internal needs of the community.

Within the context of an overall transportation system, the purpose of public transit is to provide reliable, efficient, and convenient service, and to offer an attractive alternative to the use of private cars.

A bus system best meets the criteria for North Pickering. It can be put into effect quickly; has the capacity to carry 4,000 passengers a day; can provide flexible routing; and by sharing road space with cars requires a lower capital cost.

An important aspect of community design is the planning and provision of internal services—water, sewage, electricity and telecommunications—that knit the various segments of the community into a cohesive whole. Studies have covered a broad range of potential servicing needs and methods for fulfilling them.

Environmental considerations will lead to the adoption of innovative methods for handling storm drainage. Many of the concepts proposed are directly related to specific planning criteria such as land use and densities, as well as broad questions of architectural and development controls, financing, design, construction and operation.

As a matter of policy, North Pickering is committed to the conservation of energy. Since awareness of a potential energy crisis has occurred only recently



national and provincial policies are still in a formative stage. Nevertheless, methods for conserving energy in North Pickering must be compatible with policies on the larger scale.

A continuous network of parkland, recreation areas and other forms of open space should link the main areas of activities. A system of pathways for pedestrians and cyclists would be provided in a manner similar to the road and transit routes. The valleys of the West Duffin Creek would form part of this network.

A main hiking trail will be developed along the West Duffin Creek Valley, with picnic areas at either end. Eastwest open space corridors would be developed to complement the valley lands. Water courses, wooded areas and other existing natural features would, where possible, be retained and enhanced for open space uses.

Within local housing areas there would be neighborhood parks, often located adjacent to the elementary schools. They would be supplemented by tot lots, walkways and amenity areas.

Within each district served by a secondary centre, major community parks would be provided for intensive outdoor sports and recreational uses.

A major regional park of approximately 800 hectares (2,000 acres) is proposed for the south-west corner of the site in the open space system, north of the Metro Zoo.

Major components of the regional park would include a family camping area, an outdoor education centre, an equestrian centre and a range of playing fields for such sports as baseball, football and soccer.

Strong emphasis has been placed on the need to minimize adverse environmental impact while adopting measures to enhance positive factors. Efforts should be made to protect prominent and unique landscape features; to preserve and enhance existing vegetation, and water quality levels; and to preserve the unique cultural and historical features of the area.

In this context, building set-back requirements should be proposed to protect valley lands and stream beds. During construction, efforts should be made to control storm runoff and erosion. Woodlots should be protected and programs developed to encourage an urban forestry program. In many cases, the water courses and woodlands should be used as focal points for recreational lands and community open space.

The implementation of the recommended plan has been structured into four development stages based on increments of 15,000 to 20,000 people, roughly the population served by a secondary centre.

The proposed implementation schedule has been staged over 15 years. To build a community of 75,000 by 1991 will require an average rate of construction of 1,500 to 1,600 dwelling units a year for 15 years, with a peak rate of 2,000 to 2,500 units per year. This rate is proposed for three reasons:

- 1) The demand for housing in the greater Toronto area, is approximately 20,000 dwelling units a year. North Pickering can help meet the demand.
- 2) To create a comprehensive, balanced community a substantial population base must be established quickly to ensure that the economic activity generated by the community is not diverted

to other centres. This should reduce commuting pressures.

3) Current interest rates make it necessary to recover land, servicing and development costs as quickly as possible. Otherwise, the debt burden could increase the cost of housing, restrict the quality of development, and inhibit the ability to provide facilities for social and community services.

Housing policy for North Pickering is designed to attract people with a wide range of values, preferences and life styles. The new community will provide a diversity of residential environments, dwelling types, tenure conditions and housing costs. Nevertheless, housing must relate to demographic realities, existing and emerging, and must match the employment characteristics of the community.

An overall density target of 33 dwelling units per acre) has been selected to assist in attracting a diverse population to the new community. This will give an average residential density of 105 persons per hectare (42 persons per acre).

The overall distribution of residential densities follows directly from the general approach to community design, structure and accesibility. Within the constraints of the density ranges proposed, the maximum number of homes should be located as closely as possible to:

- a) at least one of the levels of community facilities and services they require, thus meeting the requirements of convenience.
- b) the transportation network and public transit system so that alternative levels of community facilities and services are readily accessible. This would meet the requirements of choice.

DWELLING DENSITY

High density areas - 100 dwelling units per hectare [40 dwelling units per acre]:

This residential environment would consist of six to eight-storey apartment blocks set in open space. Depending on location, the open space may be green and landscaped, or urban in character.

Medium-density areas - 37 dwelling units per hectare [15 dwelling units per acre]:

These would consist mainly of town house complexes or small scale three-storey walk-up apartments.

These medium-density areas would

be distributed in two ways: inthe form of an outer ring to the high-density areas, and adjacent to minor arterial roads which traditionally have been the focus of local community life.

Low-density areas - 20 dwelling units per hectare [eight dwelling units per acrel:

Single-family housing would be the predominant residential type in these areas, since they would consist of family, auto-orientated households, they have the opposite locational characteristics to high-density areas.

Mixed low/medium density areas - 25 -30 dwelling units per hectare [10 - 12 dwelling units per acre]:

The inclusion of mixed low/mediumdensity areas is intended to accommodate the possibility that residential preferences and density mix will change over time.

The mixed areas would be located along minor arterial streets. Although not directly associated with either secondary centres or the central area, access to these areas could reasonably be met.



The residents of the new community will require a broad range of social programs and facilities. The plan strives to provide a comprehensive social program for all members of the community.

Where appropriate, the programs and facilities will be linked to enhance the effective use of physical, financial and human resources.

The plan strives to ensure variety, choice, access and opportunities for social enrichment, and emphasizes the ability of residents and members of the community to participate in ongoing planning.

Consideration has been given in planning of educational facilities to the requirements for different types of schools and to the fact that there is a growing demand for formal life-long learning opportunities. Facilities will be conveniently located to accommodate adult education, general education, special education and private programs.

In addition to day care centres, a private home day care program could be developed if the need arises.

Residents will need a broad range of options for recreation and leisure. These can be provided through community programs and facilities, as well as through school, church, health, library and day care programs. Public and private open space and private recreation and entertainment activities will increase choices and options.

Space and facilities for recreation should be based primarily on the emerging character of the community. At this time, emphasis is placed on allocating sufficient space to allow for flexibility and to ensure some basic programs at the outset.

The basic objective for the agricultural community is to encourage long-term agriculture on the highly productive soils on the western portion of the site.

Approximately 4,200 hectares (10,400 acres) have been classified as good agricultural land. Seventy per cent of the land within the area west of the West Duffin Creek is designated as a prime agricultural area. This publicly-owned land will be retained in long-term agricultural production and will be managed by the province under a farm-lease program.

To maximize the productive use of the soil, and to encourage a diversity of agricultural practices, the plan recommends that the agricultural community be structured into two categories:

Agricultural area No. 1 consists of land, people and institutions primarily devoted to and supportive of agricultural production as a full-time livelihood.

Livestock, poultry, and crop production would be encouraged where these are related to large acreage farm units. Commercial market gardening, sod farming and the growing of trees and small fruits would also be allowed.

Agricultural area No. 2 would provide for a diversification of both agricultural and recreational uses. Although this area will not be urbanized, it should accommodate roads and services for the urban area.

Land uses similar to agricultural area No. 1 would be encouraged where they presently exist and other smaller agricultural uses should be allowed such as greenhouse operations, nurseries, orchards, riding stables, market gardens and public allotment gardens.

Priority in area No. 1 should be given to diversified full-time agricultural operations, although qualified approval would be given to part-time farming, agriculture-related industry, recreation facilities, social institutions and existing residences. Where appropriate, allotment gardens for urban and rural residents would be located in buffer zones around hamlets.

The hamlets of Locust Hill, Whitevale, Cherrywood, Cherrywood East and Green River, as well as Martin's Subdivision have been exempted from expropriation.

The hamlets' role should be determined in collaboration with their residents. Each hamlet's function can be related as desired, to the agricultural area, the urban area, or both. This should apply also to the social community of Cedar Grove.

With the preparation of the recommended plan and its presentation to the North Pickering Development Corporation, the North Pickering Project team has completed its task. The recommendations and the substantial research and background study which support them will provide the foundation for the plan for development which the corporation will prepare.

The corporation's plan for development subsequently will be translated into official plan proposals to affected municipalities under procedures of the Ontario Planning Act.



